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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,764

03/25/2004

George E. Richards

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PPG INDUSTRIES, INC.  
Intellectual Property Department  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER
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WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT	PAPER NUMBER
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1732

MAIL DATE	DELIVERY MODE
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07/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/809,764	<b>Applicant(s)</b> RICHARDS ET AL.	
	<b>Examiner</b> Jeff Wollschlager	<b>Art Unit</b> 1732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 12, 16 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15, 17-19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Prosecution on the merits of this application is reopened on claims 1-11, 13-15, 17-19 and 21-24 considered unpatentable for the reasons indicated below.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Soehngen et al. (US 4,057,607).

Regarding claim 1, Soehngen et al. teach a process for manufacturing thermosetting powder coating compositions (Abstract; col. 4, lines 58-66) comprising: A) feeding a base material comprising a dry ingredients a resin and a curing agent to an extruder from an initial position (18); B) adding at least one hard to incorporate additive (e.g. aluminum flake, pigment, flow additives) to the base material after the base material enters the extruder and before it exits the extruder [(17); col. 9, lines 28-36; col. 5, lines 20-56] and C) passing the combined base material and hard to incorporate additives(s) through at least a portion of the extruder to form a thermosetting powder coating composition (Abstract; Figure 1).

As to claim 3, Soehngen et al. teach the base material travels through a portion of the extruder before the addition of the hard to incorporate additive(s) in step B) (extruder [(17); col. 9, lines 28-36; col. 5, lines 20-56])

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As to claim 4, Soehngen et al. teach the hard to incorporate additives are introduced to the extruder at the initial position with the base material extruder (col. 5, lines 20-56 col. 9, lines 28-36)

As to claim 5, Soehngen et al. teach the process may be used to create different thermosetting powders using a common base material [Example; col. 8, lines 10 – col. 9, line 37; col. 5, lines 20-56; col. 4, lines 3,17; col. 2, lines 58-59).

As to claim 6, Soehngen et al. teach the hard to incorporate additive comprises pigment(s) (col. 9, lines 28-36; col. 5, lines 20-56).

Claims 1, 3, 4, 6, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Harmuth (US 4,320,048).

Regarding claims 1, 3 and 6, Harmuth teaches a method of forming pigmented powder coatings wherein a major portion of the non-pigmented constituents, such as resin binders and curing agents (col. 2, lines 51-68), are fed to an extruder and wherein the pigment dispersions, the balance of the non-pigment constituents and a volatile dispersing liquid are introduced downstream of the major portion of the non-pigmented constituents (col. 1, line 55-col. 2, line 50). Subsequently, the blended constituents are urged to another zone within the extruder, devolatilized, and then upon exiting the extruder, the extrudate is cooled, broken into chips, and ground into a fine powder (col. 5, lines 1-22; col. 6, lines 16-32). As disclosed in the instant specification, pigments and flow additives are considered to be “hard to incorporate additives”.

As to claims 4 and 9, Harmuth discloses other additives, such as flow control additives, may be employed (col. 3, lines 30-37; col. 1 lines 55-68).

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As to claim 7, Harmuth discloses the pigments are similar to those used in conventional coatings and exemplifies the formation of one suitable liquid pigment dispersion (col. 4, lines 3-34).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048), as applied to claims 1, 3, 4, 6, 7, and 9 above, in view of either of Rudolph (US 4,684,488) or Fintel (US 4,919,872).

As to claim 2, Harmuth teaches the method as set forth above. Harmuth does not expressly teach the claimed monitoring and control steps. However, each of Rudolph (Abstract; Figure 1; col. 1, line 8-col. 2, line 8; col. 3, lines 1-24); and Fintel (Figure 2; Figure 4; col. 1, lines 11-23; col. 4, lines 3-48) individually teach processes for controlling the color of extruded materials.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the color control teachings found in either of Rudolph or Fintel with the method of Harmuth, for the purpose of providing a high quality powder coating material having the desired color while reducing production waste and costs.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048), as applied to claims 1, 3, 4, 6, 7, and 9 above.

As to claim 5, Harmuth teaches the method as set forth above. Harmuth also discloses forming powdered coating compositions, plural (col. 1, lines 6-11), determining a suitable pigment-binder/resin ratio (col. 1, lines 55-60), and further discloses examples of suitable pigments (col. 3, lines 25-30), and exemplifies a control sample and an inventive sample employing the same base material (col. 5, lines 26-col. 6, lines 42). Harmuth does not expressly teach repeating the steps as claimed. However, the suggestion and implication of Harmuth as outlined above is that various thermosetting powder coatings may be formed as desired to produce a variety of viable products of varying colors, as is routinely practiced in the art.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have repeated the steps as claimed while practicing the method of Harmuth to produce a variety of powder coating compositions having different colors with the same base material.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048), as applied to claims 1, 3, 4, 6, 7, and 9 above, in view of Chang et al. (US 4,973,439).

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As to claims 10 and 11, Harmuth meters the pigment dispersion into the extruder (col. 1, line 5-col. 2, line 50; col. 5, line 18-21). The metering of the pigment dispersion into the extruder as disclosed by Harmuth suggests and implies the liquid is injected. However, additionally, Chang et al. teach a method of introducing liquid mixture into an extruder wherein the liquid is injected (Figures 1 and 2).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have metered the pigment dispersion disclosed in the method of Harmuth by injecting the pigment dispersion and liquid material as suggested by Chang et al., since Chang et al. suggests injection is an art recognized equivalent means for introducing liquids into an extruder.

Further it is submitted that the pigment dispersion employed by Harmuth is implicitly fed from some vessel and that this vessel is reasonably understood to be a low-pressure vessel. It is also implicit that the pressure vessel is connected to a source of pressurization, such as atmospheric air or a nitrogen source, in order to effectively feed the metering device (i.e. net positive suction head to the pump). Further still, the pressure vessel would have implicitly and routinely contained a mechanism, such as a relief valve, rupture disk and/or a vacuum relief, for maintaining the pressure in the vessel to a desired value to ensure the vessel does not collapse or burst. The examiner notes that one having ordinary skill would have been motivated to control the pressure as low as possible for the purposes of minimizing capital costs, minimizing plant utility costs (e.g. nitrogen), and to meet environmental requirements to minimize vapor emissions while ensuring the metering device was adequately fed and would have been motivated to employ a mechanism as claimed to prevent the vessel from collapsing or bursting.

Furthermore, it is the examiner's position that any of the claimed structural limitations not implicit or intrinsic within the Harmuth reference do not affect the step-wise completion of the

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process in a manipulative sense. It is submitted that to be entitled to patentable weight in method claims, recited structural limitations must affect the method in a manipulative sense and not amount to mere claiming of a use of a particular structure. See *Ex parte Pfeiffer* 135 USPQ 31.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048), as applied to claims 1, 3, 4, 6, 7, and 9 above, and further in view of either of Rathschlag et al. (US 6,638,353) or Dietz et al. (US 6,537,364).

As to claims 7 and 8, Harmuth teaches the method as set forth above wherein a suitable pigment is added to an extruder with a volatile dispersing liquid and thereby teaches a liquid pigment dispersion in one reasonable interpretation of the claim. Alternatively, Rathschlag et al. (Abstract; col. 1, lines 9-22; col. 2, lines 25-68; col. 4, lines 5-11; col. 6, lines 42-col. 7, lines 63; col. 8, lines 24-43) and Dietz et al. (Abstract; col. 1, lines 39-48; col. 8, lines 15-68; col. 10, lines 12-14) disclose small particle size pigments suitable for employment in powder coating applications that are formed from liquids, optionally dried, and then used as pigments in processes for forming powdered coatings.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have employed the pigments disclosed by either of Rathschlag et al. or Dietz et al. in the method of Harmuth since Rathschlag et al. teach their pigment is non-dusting (Abstract) and Dietz et al. suggest their pigments have reduced levels of foreign contamination and a narrow size distribution (col. 1, lines 39-46).



Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048) in view of either of Vanier et al. (US 2003/0125417) or Dietz et al. (US 6,537,364).

Regarding claim 13, Harmuth teaches a method of forming pigmented powder coatings wherein a major portion of the non-pigmented constituents, such as resin binders and curing agents (col. 2, lines 51-68), are fed to an extruder and wherein the pigment dispersions, the balance of the non-pigment constituents and a volatile dispersing liquid are introduced downstream of the major portion of the non-pigmented constituents (col. 1, line 55-col. 2, lines 50). Subsequently, the blended constituents are urged to another zone within the extruder, devolatilized, and then upon exiting the extruder, the extrudate is cooled, broken into chips, and ground into a fine powder (col. 5, lines 1-22; col. 6, lines 16-32). Harmuth does not expressly teach the pigment is a "hyperdispersed pigment".

However, each of Vanier et al. (paragraphs [0003-0008; 0021-0022; 0027-0028]) and Dietz et al. (Abstract; col. 1, lines 39-48; col. 8, lines 15-68; col. 10, lines 12-14) disclose pigments suitable and desirable for powder coating applications that meet the "hyperdispersed" limitation in the claim.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have employed the pigments disclosed by either of Vanier et al. or Dietz et al. in the method of Harmuth since Vanier et al. teach their colorants yield desired visible colors (paragraph [0021] having a desired absorbance in the visible light spectrum (paragraph [0007]) and Dietz et al. suggest their pigments have reduced levels of foreign contamination and a narrow size distribution (col. 1, lines 39-46).

As to claim 15, Harmuth teaches the method as set forth above. Harmuth also discloses forming powdered coating compositions, plural (col. 1, lines 6-11), determining a suitable

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pigment-binder/resin ratio (col. 1, lines 55-60), and discloses examples of suitable pigments (col. 3, lines 25-30), and exemplifies a control sample and an inventive sample employing the same base material (col. 5, lines 26-col. 6, lines 42). Harmuth does not expressly teach repeating the steps as claimed. However, the suggestion and implication of Harmuth as outlined above is that various thermosetting powder coatings may be formed as desired to produce a variety of viable products of varying colors as is routinely practiced in the art.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have repeated the steps as claimed while practicing the method of Harmuth to produce a variety of powder coating compositions having different colors with the same base material.

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048) in view of either of Vanier et al. (US 20030125417) or Dietz et al. (US 6,537,364), as applied to claims 13 and 15 above, and further in view of either of Rudolph (US 4,684,488) or Fintel (US 4,919,872).

As to claim 14, Harmuth teaches the method as set forth above. Harmuth does not expressly teach the claimed monitoring and control steps. However, each of Rudolph (Abstract; Figure 1; col. 1, line 8-col. 2, line 8; col. 3, lines 1-24); and Fintel (Figure 2; Figure 4; col. 1, lines 11-23; col. 4, lines 3-48) individually teach processes for controlling the color of extruded materials.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the color control teachings found in either of Rudolph or Fintel with the method of Harmuth, for the purpose of providing a high quality powder coating material having the desired color while reducing production waste and costs.

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Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048) in view of either of Vanier et al. (US 20030125417) or Dietz et al. (US 6,537,364), as applied to claims 13 and 15 above, and further in view of Chang et al. (US 4,973,439).

As to claims 21 and 22, Harmuth meters the pigment dispersion into the extruder (col. 1, line 5-col. 2, line 50; col. 5, line 18-21). The metering of the pigment dispersion into the extruder as disclosed by Harmuth suggests and implies the liquid is injected. However, additionally, Chang et al. teach a method of introducing liquid mixture into an extruder wherein the liquid is injected (Figures 1 and 2).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have metered the pigment dispersion disclosed in the method of Harmuth by injecting the pigment dispersion and liquid material as suggested by Chang et al., since Chang et al. suggests injection is an art recognized equivalent means for introducing liquids into an extruder.

Further it is submitted that the pigment dispersion employed by Harmuth is implicitly fed from some vessel and that this vessel is reasonably understood to be a low-pressure vessel. It is also implicit that the pressure vessel is connected to a source of pressurization, such as atmospheric air or a nitrogen source, in order to effectively feed the metering device (i.e. net positive suction head to the pump). Further still, the pressure vessel would have implicitly and routinely contained a mechanism, such as a relief valve, rupture disk and/or a vacuum relief, for maintaining the pressure in the vessel to a desired value to ensure the vessel does not collapse or burst. The examiner notes that one having ordinary skill would have been motivated to control the pressure as low as possible for the purposes of minimizing capital costs, minimizing plant utility costs (e.g. nitrogen), and to meet environmental requirements to minimize vapor

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emissions while ensuring the metering device was adequately fed and would have been motivated to employ a mechanism as claimed to prevent the vessel from collapsing or bursting.

Furthermore, it is the examiner's position that any of the claimed structural limitations not implicit or intrinsic within the Harmuth reference do not affect the step-wise completion of the process in a manipulative sense. It is submitted that to be entitled to patentable weight in method claims, recited structural limitations must affect the method in a manipulative sense and not amount to mere claiming of a use of a particular structure. See *Ex parte Pfeiffer* 135 USPQ 31.

Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048) in view of either of Vanier et al. (US 2003/0125417) or Dietz et al. (US 6,537,364), and in view of either of Rudolph (US 4,684,488) or Fintel (US 4,919,872).

Regarding claim 17, Harmuth teaches a method of forming pigmented powder coatings wherein a major portion of the non-pigmented constituents, such as resin binders and curing agents (col. 2, lines 51-68), are fed to an extruder and wherein the pigment dispersions, the balance of the non-pigment constituents and a volatile dispersing liquid are introduced downstream of the major portion of the non-pigmented constituents (col. 1, line 55-col. 2, lines 50). Subsequently, the blended constituents are urged to another zone within the extruder, devolatilized, and then upon exiting the extruder, the extrudate is cooled, broken into chips, and ground into a fine powder (col. 5, lines 1-22; col. 6, lines 16-32). Harmuth does not expressly teach the pigment is a "hyperdispersed pigment" nor does Harmuth expressly teach the claimed monitoring and control steps.

However, each of Vanier et al. (paragraphs [0003-0008; 0021-0022; 0027-0028]) and Dietz et al. (Abstract; col. 1, lines 39-48; col. 8, lines 15-68; col. 10, lines 12-14) disclose

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pigments suitable and desirable for powder coating applications that meet the “hyperdispersed” limitation in the claim. Furthermore, each of Rudolph (Abstract; Figure 1; col. 1, line 8-col. 2, line 8; col. 3, lines 1-24); and Fintel (Figure 2; Figure 4; col. 1, lines 11-23; col. 4, lines 3-48) individually teach processes for controlling the color of extruded materials.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the color control teachings found in either of Rudolph or Fintel with the method of Harmuth, for the purpose of providing a high quality powder coating material having the desired color while reducing production waste and costs.

Additionally, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the color control teachings found in either of Rudolph or Fintel with the method of Harmuth, for the purpose of providing a high quality powder coating material having the desired color while reducing production waste and costs.

As to claim 18, Harmuth teaches the method as set forth above. Harmuth also discloses forming powdered coating compositions, plural (col. 1, lines 6-11), determining a suitable pigment-binder/resin ratio (col. 1, lines 55-60), and discloses examples of suitable pigments (col. 3, lines 25-30), and exemplifies a control sample and an inventive sample employing the same base material (col. 5, lines 26-col. 6, lines 42). Harmuth does not expressly teach repeating the steps as claimed. However, the suggestion and implication of Harmuth as outlined above is that various thermosetting powder coatings may be formed as desired to produce a variety of viable products of varying colors as is routinely practiced in the art.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have repeated the steps as claimed while practicing the method of Harmuth to produce a variety of powder coating compositions having different colors with the same base material.

As to claim 19, Harmuth discloses the pigments are similar to those used in conventional coatings and exemplifies the formation of one suitable liquid pigment dispersion (col. 4, lines 3-34). Furthermore, Dietz et al. (Abstract; col. 1, lines 39-48; col. 8, lines 15-68; col. 10, lines 12-14) and Vanier et al. (paragraph [0027]) disclose small particle size pigments suitable for employment in powder coating applications that are formed from liquids and then used as pigments in processes for forming powdered coatings.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmuth (US 4,320,048) in view of either of Vanier et al. (US 20030125417) or Dietz et al. (US 6,537,364), and in view of either of Rudolph (US 4,684,488) or Fintel (US 4,919,872), as applied to claims 17-19 above, and further in view of Chang et al. (US 4,973,439).

As to claims 23 and 24, Harmuth meters the pigment dispersion into the extruder (col. 1, line 5-col. 2, line 50; col. 5, line 18-21). The metering of the pigment dispersion into the extruder as disclosed by Harmuth suggests and implies the liquid is injected. However, additionally, Chang et al. teach a method of introducing liquid mixture into an extruder wherein the liquid is injected (Figures 1 and 2).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have metered the pigment dispersion disclosed in the method of Harmuth by injecting the pigment dispersion and liquid material as suggested by Chang et al., since Chang et al. suggests injection is an art recognized equivalent means for introducing liquids into an extruder.

Further it is submitted that the pigment dispersion employed by Harmuth is implicitly fed from some vessel and that this vessel is reasonably understood to be a low-pressure vessel. It is also implicit that the pressure vessel is connected to a source of pressurization, such as

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atmospheric air or a nitrogen source, in order to effectively feed the metering device (i.e. net positive suction head to the pump). Further still, the pressure vessel would have implicitly and routinely contained a mechanism, such as a relief valve, rupture disk and/or a vacuum relief, for maintaining the pressure in the vessel to a desired value to ensure the vessel does not collapse or burst. The examiner notes that one having ordinary skill would have been motivated to control the pressure as low as possible for the purposes of minimizing capital costs, minimizing plant utility costs (e.g. nitrogen), and to meet environmental requirements to minimize vapor emissions while ensuring the metering device was adequately fed and would have been motivated to employ a mechanism as claimed to prevent the vessel from collapsing or bursting.

Furthermore, it is the examiner's position that any of the claimed structural limitations not implicit or intrinsic within the Harmuth reference do not affect the step-wise completion of the process in a manipulative sense. It is submitted that to be entitled to patentable weight in method claims, recited structural limitations must affect the method in a manipulative sense and not amount to mere claiming of a use of a particular structure. See *Ex parte Pfeiffer* 135 USPQ 31.

### ***Response to Arguments***

Applicant's arguments have been fully considered and are partially persuasive. The 35 USC 103(a) rejections over Soehngen et al. (US 4,057,607) have been withdrawn. However, the 35 USC 102(b) rejections of claims 1 and 3-6 over Soehngen et al. are maintained.

Applicant's arguments suggest that aluminum is not reasonably considered to be a hard to incorporate additive and that one having ordinary skill in the art would recognize this. However, the examiner notes that the term "hard to incorporate additives" is defined in the specification to include "pigments, flow additives, and components having a melting point higher

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than the melting point of the resin..." (paragraph [0008] of US 2005/0212159). The examiner submits that aluminum clearly meets this melting point criterion and is reasonably understood to meet the claim limitation under a reasonable interpretation of the term.

Furthermore, the examiner notes that a reference is no less anticipatory if, after disclosing the invention, the reference then disparages it (MPEP 2131.05)

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakamura et al. (US 2002/0128356) discloses a pertinent method of producing a colored particles for powder coating applications (paragraphs [0072, 0002, 0009-0012, 0017, 0052-0058]).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager  
Examiner  
Art Unit 1732

  
CHRISTINA JOHNSON  
SUPERVISORY PATENT EXAMINER

July 26, 2007